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IMPACT OF TREATMENT STRATEGIES ON CLINICAL OUTCOMES OF ATRIAL FIBRILLATION PATIENTS WITH THYROID DISEASE

ACC Poster Contributions
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Background: Atrial fibrillation (AF) treatment strategies have not been studied in patients with concomitant thyroid disease(TD).

Methods: We used a composite mortality & cardiovascular hospitalization (CVH) endpoint to compare clinical outcomes with amiodarone as primary therapy (Amio) to either other rhythm therapy (OR) or rate control (Rate). We compared outcomes in pts with TD on replacement therapy (TD+) with the remaining pts in each group.

Results: Amio pts (n=735) were compared to OR (n=1298) & Rate (n=2027) cohorts. 56 pts (7.6%) with Amio,114 pts (8.8%) with OR & 178 pts (8.8%) with Rate had TD+ identified (p=.56). Increasing age (p<.005 within each treatment) & female gender (p<.0001 within each treatment) were more common in TD+ pts. TD+ as defined had no impact on mortality in any group. However, there was an increase in CVH events with TD+ in Amio and OR pts compared to Rate (Figure, p for pairwise comparisons <.001) & with Amio compared to OR (p <.05). Among patients with TD+, after adjusting for clinical variables, treatment was still a significant predictor of CVH maintaining increased Amio related risk ((Hazard Ratio =2.6 Amio versus Rate, p<.0001),& OR risk (Hazard Ratio =1.7 OR versus Rate, p=.002).

Conclusions: 1.TD+ was more commonly seen in elderly & female subpopulations in AFFIRM. 2. Rhythm control strategies are independently associated with more CVH in AF with concomitant TD despite replacement thyroid hormone therapy, with Amio treated pts having the poorest outcome.